

REMARKS

Claims 15-30, 38, 41-46 and 51-55, 57, 61, 62 and 65-70 are currently pending in the subject application. Claims 28-30, 38, 46, 51-55 and 57 are withdrawn from consideration. Claims 20 and 21 have been amended. Claims 15, 53 and 57 are independent.

Applicants request, in the next Office action, that the Examiner indicate the acceptability of the drawings filed on August 26, 2003.

A. Introduction

In the outstanding Office action, mailed September 18, 2008,

1. claim 21 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention;
2. claims 15-17, 19-23, 41, 61 and 62 were rejected under 35 U.S.C. § 103(a) as being unpatentable over EP 175,460 (“the EP ’460 reference”) in view of EP 164,834 (“the EP ’834 reference”);
3. claims 18, 27 and 42-45 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the EP ’460 reference in view of the EP ’834 reference and U.S. Patent No. 5,772,905 to Chou (“the Chou reference”);
4. claims 24-26 and 65-70 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the EP ’460 reference in view of the EP ’834 reference and U.S. Patent No. 4,731,155 to Napoli et al. (“the Napoli et al. reference”); and
5. claims 15-27, 41-45, 61, 62 and 65-70 were rejected on the ground of nonstatutory obviousness-type double-patenting as being unpatentable over claims 1-29 of U.S. Patent No. 6,610,166.

B. Asserted Indefiniteness Rejections of Claim 21

In the outstanding Office action, claim 21 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Claim 21 has been amended to recite that the features are provided on the support substrate. Support for this amendment may be found, for example, on page 24, lines 13-19 of the original specification. Therefore, no new matter is added, and it is respectfully requested that this rejection be withdrawn.

C. Asserted Obviousness Rejection of Claims 15-17, 19-23, 41, 61 and 62

In the outstanding Office action, claims 15-17, 19-23, 41, 61 and 62 were rejected under 35 U.S.C. § 103(a) as being unpatentable the EP '460 reference in view of the EP '834 reference. This rejection is respectfully traversed for at least the reasons set forth below.

Claim 15 recites, in part:

simultaneously imprinting a replica of said plurality of optical elements in a material by applying the substantially planar surface of the master to the imprintable material;

providing a support substrate for the replica, the support substrate having first and second opposing parallel surfaces, the replica being on one of the first and second opposing parallel surfaces; . . . and

separating the support substrate through the first and second opposing parallel surfaces to form individual optical elements, each individual optical element including the hardened replica and the support substrate.

The Office action notes that the EP '460 reference fails to teach such separating, and relies on the separation taught in the EP '834 reference.¹ While the EP '834 reference may disclose separation of a plurality of optical elements to form individual optical elements, performing such separation on the diffraction grating disclosed in the EP '460 reference would not result in a plurality of individual optical elements, as recited in claim 15.

In particular, while the EP '460 reference may disclose using a master 10 to imprint a replica of elements 12, it is respectfully submitted that the elements 12 are not individual optical elements, but together form a grating pattern, which is the optical element. In other words, separating of the replicated element formed in the EP '460 reference would **not** result in a plurality of individual optical elements.² Separating the replicated grating pattern in the EP '460 reference would produce portions of a single optical element, each portion thereof failing to function for its intended purpose.

¹ *Office action mailed September 18, 2008, page 2.*

² See, for example, page 5 of the EP '460 reference, in which an advantage of having "no limit in the length of the replica gratings" is noted.

Even assuming, *arguendo*, one of skill in the art would consider the elements 12 of the diffraction grating in the EP '460 reference to be individual optical elements, there is still no suggestion to combine the teachings of these references. In particular, the planar lenses in the EP '834 reference are formed by a diffusion process, resulting in a continuous planar surface to be separated along lines 16. Further, in the EP '834 reference, no additional material has been provided on the substrate 10 during formation of the planar lenses 4. In contrast, the elements 12 of the EP '460 reference includes material 22 provided to an entire surface of the master 10, and hence the substrate 16, in which the diffraction grating is embossed. Absent the teachings of the present application, one of skill in the art would not appreciate how to separate such a structure, as noted, for example, in the paragraph spanning pages 22 and 23 of the original specification.

Therefore, it is respectfully submitted that neither the EP '460 reference nor the EP '834 reference, either alone or in combination, suggest, much less disclose, the limitations as recited in independent claim 15. The remaining rejected claims depend, either directly or indirectly, from claim 15, and are believed to be allowable for at least the reasons set forth above.

D. Asserted Obviousness Rejection of Claims 18, 27 and 42-45

In the outstanding Office action, claims 18, 27 and 42-45 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the EP '460 reference in view of the EP '834 reference and the Chou reference. This rejection is respectfully traversed for at least the reasons set forth below.

The rejected claims depend, either directly or indirectly, from claim 15. The Chou reference fails to provide the teachings noted above as missing in Section C. Therefore, it is respectfully submitted that these claims are allowable for at least the reasons claim 15 is allowable.

E. Asserted Obviousness Rejection of Claims 24-26 and 65-70

In the outstanding Office action, claims 24-26 and 65-70 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the EP '460 reference in view of the EP '834 reference and the

Napoli et al. reference. This rejection is respectfully traversed for at least the reasons set forth below.

The rejected claims depend, either directly or indirectly, from claim 15. The Napoli et al. reference fails to provide the teachings noted above as missing in Section C. Therefore, it is respectfully submitted that these claims are allowable for at least the reasons claim 15 is allowable.

Further, it is submitted that the Napoli et al. reference fails to provide any of the additional limitations recited in these dependent claims. For example, there is no teaching or suggestion of securing a substrate having optical lithographs thereon secured to the substrate having the replicas before separating, as recited in claim 67.

It is respectfully requested that this rejection be reconsidered and withdrawn.

F. Asserted Double-Patenting Rejection of Claims 15-27, 41-45, 61, 62 and 65-70

In the outstanding Office action, claims 15-27, 41-45, 61, 62 and 65-70 were rejected on the ground of nonstatutory obviousness-type double-patenting as being unpatentable over claims 1-29 of U.S. Patent No. 6,610,166. A terminal disclaimer was submitted on January 16, 2007, thereby obviating this rejection.

G. Conclusion

The above remarks demonstrate the failings of the outstanding rejections, and are sufficient to overcome them. However, while these remarks may refer to particular claim elements, they are not intended to, nor need they, comprehensively address each and every reason for the patentability of the claimed subject matter over the applied art. Accordingly, applicants respectfully submit that the claims are allowable for reasons including, but not limited to, those set forth above, and patentability of the claims does not depend solely on the particular claim elements discussed above.

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

LEE & MORSE, P.C.

Date: March 16, 2009



Susan S. Morse, Reg. No. 35,292

LEE & MORSE, P.C.
3141 FAIRVIEW PARK DRIVE
SUITE 500
FALLS CHURCH, VA 22042
703.207.0008 TEL
703.207.0003 FAX

PETITION and
DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.